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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/873,881	06/04/2001	Fred W. Scott	18617.NEW	6373

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EXAMINER

FOLEY, SHANON A

ART UNIT	PAPER NUMBER
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1648

DATE MAILED: 08/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/873,881

Applicant(s)

SCOTT ET AL.

Examiner

Shanon Foley

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) 6,7 and 12 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 8-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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DETAILED ACTION

The examiner of your application has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Group Art Unit 1648, Examiner Foley.

Applicant's response filed July 25, 2005 and a review of 07/726,609 determined that the subject matter of the instant invention is supported in the disclosure of the parent application. Therefore, the rejection over 35 USC 102(e) is withdrawn. However, in view of further considerations of the prior art, new rejections are required.

Claims 1-12 are pending, claims 6, 7 and 12 are withdrawn from consideration due to a nonelected invention and claims 1-5 and 8-11 are under consideration.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-5 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 13-17 of U.S. Patent No. 6,241,989 B1. Although the conflicting claims are not identical, they are not patentably distinct from each other because

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the claims of '989 encompass expressing more than one exogenous gene from a feline pathogen into the raccoon poxvirus. Therefore, the inventions are not patentably distinct.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5 and 8-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Esposito et al. (US 5,266,313) in view of Parrish et al. ('88, 91), Martyn et al. or Carlson et al. (All of these references were provided in the IDS submitted January 2, 2002).

The claims are drawn to a multivalent recombinant raccoon poxvirus vaccine that has more than one feline pathogen antigen inserted into the thymidine kinase gene of the poxvirus. Each feline antigen is expressed from a separate promoter. The poxvirus infects and replicates in feline cells and each of the feline antigens is expressed from a separate promoter.

Esposito et al. disclose raccoon poxviruses comprising exogenous rabies glycoprotein G gene sequences inserted within the thymidine kinase region of the raccoon poxvirus and using this virus in methods of inducing protective immune responses, see claims 1-3, 8 and 9.

Esposito et al. do not teach the recombinant poxvirus expressing additional antigens. However, Parrish et al. ('88, 91), Martyn et al. or Carlson et al. disclose the cloning and nucleotide sequence of FPV V2.

One of ordinary skill in the art at the time the invention was made would have been motivated to express FPV V2 of Parrish et al. ('88, 91), Martyn et al. or Carlson et al. in the

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recombinant raccoon poxvirus of Esposito et al. to immunize against different viral pathogens.

One of ordinary skill in the art at the time the invention was made would have had a reasonable expectation of success for inserting multiple genes from different feline pathogens into the thymidine kinase region of the raccoon poxvirus because this region is non-essential for raccoon poxvirus replication and encompasses a relatively large space for heterologous insertions within the poxvirus genome, as compared to the sizes of the rabies G and FPV V2, see Figures 1 and 2 of Esposito et al. and Figure 1 of Parrish ('88), Figure 3 of Parrish ('91), Figure 2 of Martyn et al. or Figure 5 of Carlson. Although none of the references teach expressing multiple exogenous genes from separate promoters, one of ordinary skill in the art at the time the invention was made would have been motivated to express each gene from a separate promoter to regulate the expression of each gene by conventional techniques.

Claims 1-5 and 8-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lodmell et al. in view of Parrish et al. ('88, 91), Martyn et al. or Carlson et al. (Lodmell et al. was also provided with the IDS submitted January 2, 2002.)

Lodmell et al. disclose raccoon poxviruses comprising exogenous rabies glycoprotein G gene sequences inserted within the thymidine kinase region of the raccoon poxvirus and using this virus in methods of inducing protective immune responses, see Tables 4 and 5 for example.

Lodmell et al. do not teach the recombinant poxvirus expressing additional antigens. However, Parrish et al. ('88, 91), Martyn et al. or Carlson et al. disclose the cloning and nucleotide sequence of FPV V2.

One of ordinary skill in the art at the time the invention was made would have been motivated to express FPV V2 of Parrish et al. ('88, 91), Martyn et al. or Carlson et al. in the

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recombinant raccoon poxvirus of Lodmell et al. to immunize against different viral pathogens.

One of ordinary skill in the art at the time the invention was made would have had a reasonable expectation of success for inserting multiple genes from different feline pathogens into the thymidine kinase region of the raccoon poxvirus because this region is non-essential for raccoon poxvirus replication and encompasses a relatively large space for heterologous insertions within the poxvirus genome, as compared to the sizes of the rabies G and FPV V2, see the entire reference of Lodmell et al. and Figure 1 of Parrish ('88), Figure 3 of Parrish ('91), Figure 2 of Martyn et al. or Figure 5 of Carlson. Although none of the references teach expressing multiple exogenous genes from separate promoters, one of ordinary skill in the art at the time the invention was made would have been motivated to express each gene from a separate promoter to regulate the expression of each gene by conventional techniques.

Therefore, the invention as a whole would have been prima facie obvious to one of ordinary skill in the art absent unexpected results to the contrary.

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shanon Foley whose telephone number is (571) 272-0898. The examiner can normally be reached on M-F 6:00 AM - 2:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Housel can be reached on (571) 272-0902. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications

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may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Shanon Foley
Primary Examiner
Art Unit 1648